## MOMENTUM ESTIMATOR FOR ON-STATION MOMENTUM CONTROL

## ABSTRACT OF THE DISCLOSURE

A method and apparatus for estimating spacecraft momentum is disclosed. The method comprises the steps of generating a plurality of spacecraft momentum measurements, fitting the plurality of spacecraft momentum measurements to a parametric model of a spacecraft momentum profile having a time period of  $t_p$ , determining the momentum of the spacecraft from the parametric model; and generating an estimate of the momentum to be removed from the spacecraft at least in part from the determined momentum of the spacecraft.

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